ABSTRACT

An apparatus and method for automatically positioning a device. A sensor detects the position of a user. In response to signals from the sensor, a processor determines an ideal position for use of the device. Next, coordinates for movement of an arm supporting the device and for positioning of the device at an achievable position nearest to the ideal position are calculated, taking into account restraints, such as limitation on the sensors, actuators and motors that move the device, and nearby obstacles such as walls. The arm adjusts to move the device to the achievable position. The device is repositioned at intervals as the user moves. Once no user is detected, then the device is moved to a default position.